

WHAT WE CLAIM IS

1. Centering device for centering work pieces comprising:

a hollow casing having front and side walls;

5 a centering rod slidably supported by the casing, to protrude from a guide hole at the front wall;

actuation means operatively connected to the centering rod, to move the same rod from a retracted to an advanced position; and

10 cleaning means for cleaning the centering rod and preventing the infiltration of dirt, into the casing of the centering device;

wherein said cleaning means for the centering rod comprise:

15 at least one elastically yieldable annularly-shaped scraping member,

said annular scraping member having inner scraping edges and, an outer peripheral edge having a geometrical center;

20 a plurality of angularly spaced apart inner cross-cuts being provided to divide the scraping member into a plurality of scraping sections, each scraping section having an arch-shaped inner scraping edge, the scraping sections in a flat condition of the scraping member having a
25 same bending radius, and bending centers differently arranged around the geometrical center of the scraping mem-

ber; and

locking means for locking and conforming the scraping member against a conically-shaped annular shoulder surface, and to urge the inner edges of the scraping sections
5 against side surface of the centering rod.

2. Centering device for work pieces according to claim 1, wherein the scraping member comprises a first set of inner cross-cuts which extend from the internal peripheral edge over part of width of the same scraping member.

10 3. Centering device for work pieces according to claim 2, wherein the inner cross-cuts are of linear type and extend radially to the annular scraping member of the centering device.

4. Centering device for work pieces according to
15 claim 2, wherein the inner cross-cuts extend from the internal edge for a length equal to or more than one half the width of the scraping member.

5. Centering device for work pieces according to claims 1 or 2, wherein the scraping member comprises a
20 second set of outer cross-cuts, which extend from the outer peripheral edge over part of the width of the scraping member.

6. Centering device for work pieces according to claim 5, wherein the outer cross-cuts have spaced apart
25 side edges which open out towards the outer peripheral edge.

7. Centering device for work pieces according to claim 5, wherein the outer cross-cuts extend from the outer edge of the scraping member over a length equal to or less than one half the width of the annular scraping member of the centering device.

8. Centering device for work pieces according to claim 1, comprising at least a first and a second overlapped scraping members, wherein the cross-cuts of a scraping member are angularly spaced apart from the cross-cut of the other scraping member of the device.

9. Centering device for work pieces according to claim 1, comprising an elastically yielding support means for the scraping member disposed between the inner edge of the same scraping member and a resting surface of the casing.

10. Centering device for work pieces according to claim 1, wherein said locking means comprise a ring nut screwed onto a neck at the front wall of the hollow casing of the centering device, the neck being provided with said conically-shaped shoulder surface.